MCF 3M
Test Review Ch 4

Opener

Solve for the zeros of the following functions

i) $f(x) = -x^2 + 3x + 10$

$f(x) = -(x^2 - 3x - 10)$ → A | M = −10 | −5, +2

$f(x) = -(x+2)(x-5)$

−2 +5

ii) $f(x) = 2x^2 - 9x - 18$

Mar 29-8:18 AM

MCF 3M
Test Review Ch 3 & 4

Opener

Solve for the zeros of the following functions

i) $f(x) = -x^2 + 3x + 10$

$f(x) = -(x^2 - 3x - 10)$

$f(x) = -(x^2 + 2x - 5x - 10)$

$f(x) = -(x(x+2) - 5(x+2))$

$f(x) = -(x+2)(x-5)$

−2 and +5

A | M = −3 | −10 → −5, +2

ii) $f(x) = 2x^2 - 9x - 18$

$= 2x^2 + 3x - 12x - 18$

$= x(2x+3) - 6(2x+3)$

$= (2x+3)(x-6)$

$-\frac{3}{2}$ +6

A | M = −9 | −36 → −12, +3

$2x+3 = 0$

$2x = -3$

$x = -\frac{3}{2}$

Mar 29-8:18 AM

State the number of zeros in the following functions

i) $f(x) = -2(x+3)^2 - 6$

ii) $f(x) = (x+3)(x-3)$

iii) $f(x) = 25x^2 + 40x + 16$

Mar 29-8:25 AM

State the number of zeros in the following functions

i) $f(x) = -2(x+3)^2 - 6$

0 zeros b/c vertex below x axis and points down

ii) $f(x) = (x+3)(x-3)$ = 2 zeros

iii) $f(x) = 25x^2 + 40x + 16$ = 1 zero

$(5x+4)^2$ perfect square

Mar 29-8:25 AM

When does a rocket modelled by the function $f(x) = -2x^2 + 10x - 6$ reach it's maximum height? When does it reach 3m?

p.226 q.7-11
p.254 q.5-10
p.256 q.4-6, 8,10

Mar 29-8:27 AM

Tools Quadratics

Roots → Sub into Standard form

1) Decomposition A/M
2) Quad Formula

Zeros → 1) Decomposition

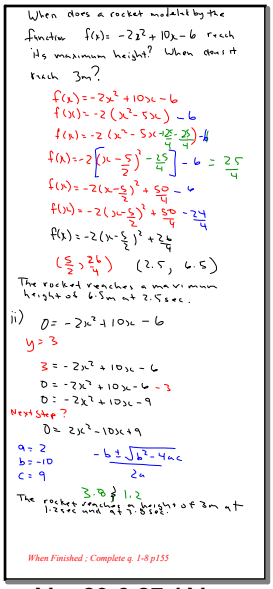
2) $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ if non-factorable

Vertex $\frac{s+t}{2}$ (h, k)

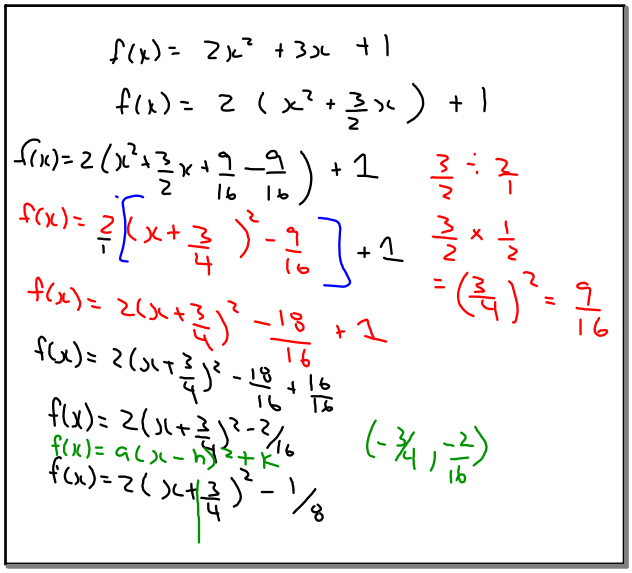
1) $\frac{s+t}{2} = x_{\text{Verle x}}$

2) Complete the Square

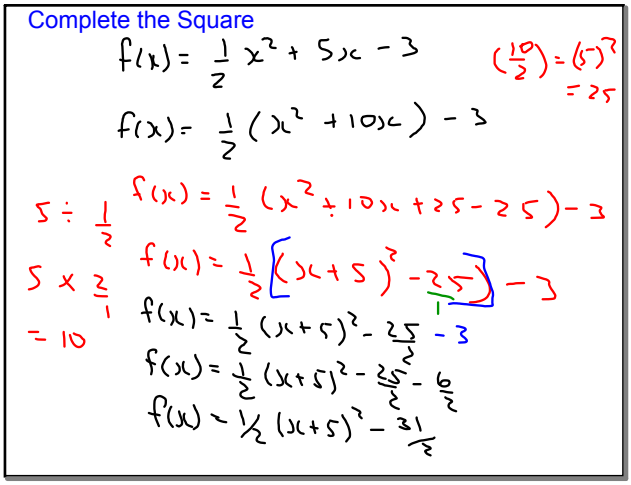
Oct 19-9:57 AM



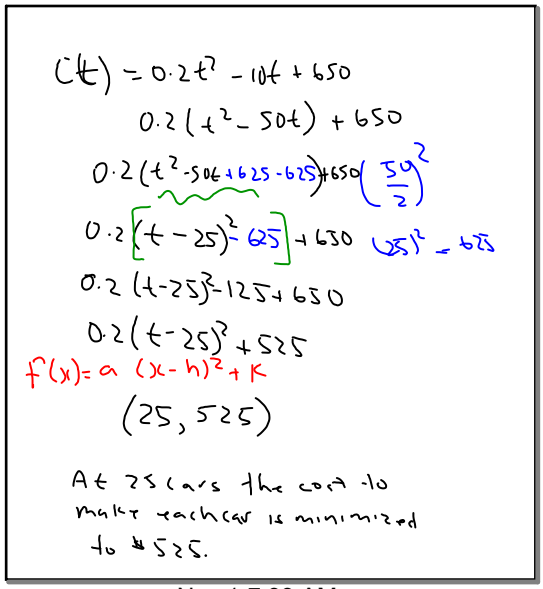
Mar 29-8:27 AM



Mar 29-10:48 AM



Mar 29-10:53 AM



Nov 1-7:33 AM

Oct 20-7:34 AM